

Notice of Allowability	Application No.	Applicant(s)	
	09/884,747	EMILIO SANTINI, HUGO ALBERTO	
	Examiner	Art Unit	
	A. Dexter Tugbang	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 2/17/04.
2. ☒ The allowed claim(s) is/are 1,3,4,7-10,15,17-19 and 23-30.
3. ☒ The drawings filed on 18 June 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>4/23/04</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Ervin F. Johnston, on April 23, 2004.

The application has been amended as follows:

Claims 5, 6, 11, 13, 14 and 31-44 have been cancelled.

Claims 1, 7, 10, 24, 25 and 28 each have been amended as follows.

1. (Currently Amended) A method of making a magnetic head, which has an air bearing surface (ABS) and a back gap (BG), comprising the steps of:

forming a second pole tip of a second pole piece with a top surface and a bottom surface at an ABS site for said ABS;

the top surface of the second pole tip having a write region located at the ABS site and a stitch region which is recessed [in its entirety] from the ABS site toward said back gap; depositing a protective sacrificial layer on the write and stitch regions of the second pole tip;

removing said sacrificial layer from only the stitch region of the second pole tip; and

forming a second pole piece yoke of a second pole piece magnetically connected to the stitch region of the second pole tip.

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7. (Currently amended) A method of making a magnetic head, which has an air bearing surface (ABS) and a back gap (BG), comprising the steps of:

forming a second pole tip of a second pole piece with a top surface and a bottom surface at an ABS site for said ABS;

the top surface of the second pole tip having a write region located at the ABS site and a stitch region which is recessed from the ABS site toward said back gap;

depositing a protective sacrificial layer on the write region of the second pole tip;

forming a second pole piece yoke of a second pole piece magnetically connected to the stitch region of the second pole tip;

said depositing of the sacrificial layer also deposits the sacrificial layer on the stitch region of the second pole tip;

removing said sacrificial layer from the stitch region of the second pole tip;

the forming of the second pole tip also forms the second pole tip with a pole tip pedestal in the stitch region;

said depositing of the sacrificial layer also deposits the sacrificial layer over [the] a first write coil layer;

said removing of the sacrificial layer includes chemically mechanically polishing the sacrificial layer until the sacrificial layer is flat and the pole tip pedestal in the stitch region is exposed, but stopping the chemical mechanical polishing before the write region of the second pole tip is exposed; and

the forming of the second pole piece yoke magnetically connects the second pole piece yoke to the second pole tip pedestal.

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10. (Currently amended) A method of making a magnetic head, which has an air bearing surface (ABS) and a back gap (BG), comprising the steps of:

forming a second pole tip of a second pole piece with a top surface and a bottom surface at an ABS site for said ABS;

the top surface of the second pole tip having a write region located at the ABS site and a stitch region which is recessed from the ABS site toward said back gap;

depositing a protective sacrificial layer on the write region of the second pole tip;

forming a second pole piece yoke of a second pole piece magnetically connected to the stitch region of the second pole tip;

said depositing of the sacrificial layer also deposits the sacrificial layer on the stitch region of the second pole tip;

removing said sacrificial layer from the stitch region of the second pole tip;

forming a first pole piece layer of a first pole piece;

depositing a first alumina layer on the first pole piece layer;

chemically mechanically polishing the first alumina layer;

[said forming of the first write coil] forming [the] a first write coil on the first alumina layer after chemical mechanical polishing the first alumina layer;

removing a first portion of the first alumina layer to expose a stitch region of the first pole piece layer which is located at said ABS site and between the ABS site and the back gap and removing a second portion of the first alumina layer at the back gap exposing a back gap region of the first pole piece layer;

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forming a first pedestal of the first pole piece connected to the stitch region of the first pole piece layer and forming a second pedestal of the first pole piece connected to the back gap region of the first pole piece layer;

said forming of the write gap layer forming the write gap layer on a top of the first pedestal of the first pole piece and on a top surface of the second pedestal of the first pole piece;

said forming of the second pole tip forms the second pole tip on the write gap layer above the first pedestal of the first pole piece;

forming a second write coil layer between the second pole tip and the back gap;
and

said depositing of the sacrificial layer also deposits the sacrificial layer on top of the second write coil layer.

24. (Currently amended) A method of making a magnetic head as claimed in claim 23 including:

said depositing of the sacrificial layer also deposits the sacrificial layer on the stitch region of the second pole tip[; and

removing said sacrificial layer from the stitch region of the second pole tip].

25. (Currently amended) A method of making a magnetic head as claimed in claim 24 including:

said depositing of the sacrificial layer also deposits the sacrificial layer over the first write coil layer;

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chemically mechanically polishing the sacrificial layer until [it] the sacrificial layer is flat, but stopping the chemical mechanical polishing before the top surface of the second pole tip is exposed; and

before forming the second pole piece yoke, said removing said sacrificial layer including etching or ion milling the sacrificial layer from the stitch region of the second pole tip until the stitch region is exposed.

28. (Currently Amended) A method of making a magnetic head as claimed in claim 25 including:

the forming of the second pole tip also forms the second pole tip with a pole tip pedestal in the stitch region of the second pole tip;

[said depositing of the sacrificial layer also deposits the sacrificial layer over the first write coil layer;]

said removing of the sacrificial layer includes chemically mechanically polishing the sacrificial layer until the sacrificial layer is flat and the pole tip pedestal in the stitch region is exposed, but stopping the chemical mechanical polishing before the write region of the second pole tip is exposed; and

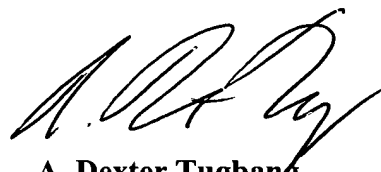
the forming of the second pole piece yoke magnetically connects the second pole piece yoke to the second pole tip pedestal.

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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Dexter Tugbang
Primary Examiner
Art Unit 3729

April 23, 2004